

Genetic screening of the *GPR101* gene in pituitary adenoma patients..

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Sporadic cases of pituitary adenomas can occur due to *de novo* mutations in genes that cause increased cell proliferation and neoplasm formation. Several genes have been implicated in increasing incidence toward pituitary tumour formation. The G-protein coupled receptor 101 (GPR101) is a membrane bound receptor responsible for cAMP production in response to growth factors within the pituitary tissue. This protein has been found to be highly expressed in some pituitary tumours, particularly in cases of early-onset or childhood gigantism. The project involves DNA extraction from whole blood samples of pituitary adenoma patients and PCR of the *GPR101* gene following by sequencing to screen for known and novel mutations in this gene.